

IN THE CLAIMS

Claims 31 and 66-76 are cancelled without prejudice or disclaimer. The remaining claims of the application have been amended herein as indicated in the following marked up copies of the claims:

30. (Thrice amended) A method for inducing an immune response in a warm-blooded animal comprising administering to the animal a composition comprising a bacterial cell, the bacterial cell comprising an expression gene, which encodes an antigen, and an Environmentally Limited Viability System, wherein

(a) the antigen is delivered to a cell of the animal,

(b) the bacterial cell is viable when in the animal and non-viable when outside of the animal, and

(c) the Environmentally Limited Viability system comprises [comprising] an essential gene that is under the control of an environmentally regulatable control sequence, wherein

(i) expression of the essential gene in the cell is essential to the viability of the cell,

(ii) the essential gene is expressed when the cell is in the animal and is not expressed when the cell is outside of the animal, [and wherein]

(iii) the essential gene is essential for metabolism, growth, cell wall integrity or cell membrane integrity of the bacterial cell, and

(iv) the essential gene is a copy of a native gene wherein the chromosomal copy of said native gene is inoperable.

32. (Amended) The method of claim 30 [31], wherein the antigen is selected from the group consisting of bacterial antigens, viral antigens, plant antigens, fungal antigens, insect antigens, and non-insect animal antigens.

AMENDED CLAIMS

30. (Thrice amended) A method for inducing an immune response in a warm-blooded animal comprising administering to the animal a composition comprising a bacterial cell, the bacterial cell comprising an expression gene, which encodes an antigen, and an Environmentally Limited Viability System, wherein

(a) the antigen is delivered to a cell of the animal,

(b) the bacterial cell is viable when in the animal and non-viable when outside of the animal, and

(c) the Environmentally Limited Viability system comprises an essential gene that is under the control of an environmentally regulatable control sequence, wherein

(i) expression of the essential gene in the cell is essential to the viability of the cell,

(ii) the essential gene is expressed when the cell is in the animal and is not expressed when the cell is outside of the animal,

(iii) the essential gene is essential for metabolism, growth, cell wall integrity or cell membrane integrity of the bacterial cell, and

(iv) the essential gene is a copy of a native gene wherein the chromosomal copy of said native gene is inoperable.

32. (Amended) The method of claim 30, wherein the antigen is selected from the group consisting of bacterial antigens, viral antigens, plant antigens, fungal antigens, insect antigens, and non-insect animal antigens.